REMARKS

I. Petition for Extension of Time

Applicants herewith petition the Commissioner for Patents to extend the time for submitting a response following the Notice of Appeal for five (5) months from 21 February 2011 to 21 July 2011. Authorization is given to charge the extension of time fee of $2,350.00 (37 C.F.R. §1.136 and §1.17) to Deposit Account No. 23-1703. Any deficiency or overpayment should be charged or credited to the above numbered deposit account.

II. Disposition of claims

Claims 2 and 5 have been canceled. Claim 6, 7 and 14 are withdrawn from consideration. Claims 1, 3, 4, 8-10, 12, 13, 15-18 and 21 are under examination.

Withdrawn claims 6 and 7 are dependent on claim 5, now canceled. For the record, Applicants reserve the right to file a divisional application directed to claim 5 and the claims dependent thereon.

III. Claim amendments

Independent claims 1 and 16 have been amended to recite the thickeners of claim 2 which has been canceled.

III. Claim rejections – 35 U.S.C. §103

a. White + Bergstrand + Morris

Claims 1-3, 5, 8-10, 12, 13, 15-18 and 21 are rejected under 35 U.S.C. §103(a) as being unpatentable over White et al., "Delivery of Esomeprazole Magnesium Enteric-Coated Pellets Through Small Caliber and Standard Nasogastric Tubes and Gastrostomy Tubes in Vivo"; Am. J. Health-Syst. Pharm., vol. 59, Nov. 1, 2002, p. 2085-2088 ("White") in combination with US 5,817,338 to Bergstrand et al. ("Bergstrand") and US 5,869,118 to Morris et al. ("Morris").

White and Bergstrand are silent with regard to the use of a thickener to facilitate the administration of a proton pump inhibitor in the form of enteric-coated pellets via a gastric tube to a pediatric population. As disclosed in the specification of the present application at page 19,

lines 3-7, the comparative testing demonstrates that narrower tubes which are suitable for a pediatric population can be used without clogging when enteric coated pellets of esomeprazole are administered, in accordance with the claimed invention, in a viscous media as opposed to the prior art method of administration in an aqueous media without a thickener.

Morris is directed to nutritional liquid compositions comprising a stabilizing system for reducing sedimentation. In the paragraph bridging columns 1-2, Morris expressly teaches against the use of the thickeners recited in claims 1 and 16 as a stabilizing system or suspender of insolubles. Specifically, Morris states that "[t]hese stabilizers require fairly high addition rates (1200 ppm and higher) and higher resulting viscosities (above 50+ cps or 0.05 Pa s) to achieve acceptable levels of suspension", thus rendering such high viscosity products unsuitable for tube feeding (See col. 2, lines 22-25). Therefore, to avoid such high addition rates and higher viscosities, Morris requires low addition rates of a specific stabilizing system, i.e., gellum gum, at a concentration of 10 – 500 ppm, preferably between 20 – 400 ppm and most preferably between 50- 100 ppm (See col. 4, lines 46-60; and claims 1-3).

With reference to the claimed invention and the supporting Examples at page 18, lines 5-9, different amounts of a thickener (5-8 g) were mixed with 100mL of tap water followed by the addition of 10 mg of esomeprazole enteric coated pellets to the different aqueous suspensions. The following table summarizes the addition rates of thickener for each aqueous suspension:

Thickener	Pellets	Mass of Solvent	Calc. x 10^6	PPM (μg/g)
5 g	0.1 g	100 g	(5/105.1) x10^6	47574
6 g	0.1 g	100 g	(6/106.1) x10^6	57090
7 g	0.1 g	100 g	(7/107.1) x10^6	66600
8 g	0.1 g	100 g	(8/108.1) x10^6	76120

The ppm calculations were made as follows with 100 mg of esomeprazole pellets added to 100 mL of the prepared viscous media:

- mass of solvent (g) = 0.1 kg (100 mL tap water) = 100 g (as density ≈ 1.0)
- ppm of thickener = mass of thickener (g) / total mass of suspension (g) x 1000 x 1000 μg/g.

In view of the table, it is evident that the aqueous suspension of the claimed invention is very different from the stabilizing system disclosed by Morris. Applicants submit that Morris teaches away from the claimed use of the thickeners recited by claims 1 and 16 to provide a high viscosity suspension (0.05 Pa s or greater) which, contrary to the teachings of Morris, is surprisingly effective in the administration of enteric coated pellets through narrow gastric tubes, e.g., CH = 6.

For all of the foregoing reasons, a *prima facie* case of obviousness has not been established. Withdrawal of the §103 rejection based on the combination of White, Bergstrand and Morris is requested.

b. White + Bergstrand + Morris + Calanchi

Claims 1-5, 8-10, 12, 13, 15-18 and 21 are rejected under 35 U.S.C. §103(a) as being unpatentable over White, Bergstrand and Morris and further in view of US 6,261,602 to Calanchi et al. ("Calanchi").

On page 8 of the Office Action mailed 2 November 2009, the Examiner states that Calanchi discloses the use of xanthan gum, carrageenan and corn starch as thickening agents to increase the viscosity of an aqueous medium containing a dispersed pharmaceutical composition. The Examiner alleges that it would have been obvious at the time the claimed invention was made to replace carrageenan with xanthan gum or starch in a ppi suspension administered via a gastric tube because Calanchi discloses that xanthan gum and starch are functionally equivalent to the carrageenan used by Morris.

However, as discussed in Section III (a), above, Morris teaches against the use of carrageenan (col. 1, lines 63-65). It is an express object of Morris to completely eliminate the use of carrageenans (col. 3, lines 60-62). If xanthan gum and starch are functionally equivalent to carrageenan as alleged by the Examiner, then it would also be an object to Morris to eliminate the use of xanthan gum and starch. Like carrageenan, it would be expected that high addition rates of xanthan gum and starch would be required. As previously discussed, Morris teaches against high addition rates (1200 ppm and higher) and higher resulting viscosities (above 50+ cps

or 0.005 Pa s) to achieve acceptable levels of suspension", thus rendering such high viscosity products unsuitable for tube feeding (See col. 2, lines 22-25).

Therefore, the Examiner's reliance on Calanchi fails to overcome the deficiency of the combination of White + Bergstrand + Morris to establish a *prima facie* case of obviousness as discussed in the preceding Section III (a). Withdrawal of the §103 rejection based on the combination of White, Bergstrand, Morris and Calanchi is requested.

CONCLUSION

Applicants have made a good faith attempt to respond to the Office Action. For all of the foregoing reasons, claims 1, 3, 4, 8-10, 12, 13, 15-18 and 21 are in condition for allowance, which action is earnestly solicited. Any fees due in connection with this response should be charged to Deposit Account No. 23-1703.

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Respectfully submitted,
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